

Amendments to the Specification

Please delete the paragraphs at page 12, lines 3-10.

After page 12, line 35, please insert the following new paragraphs:

Fig. 5A shows recording of coordinates of particles in a moving bead by a rotational scan, using a parabolic mirror.

Fig. 5B shows recording of coordinates of particles in a moving bead via scan on a prismatic mirror.

Please delete the paragraph at page 13, lines 1-2.

After page 14, line 31, please insert the following new paragraphs:

Fig. 21 (Scheme 1): Fig. 21A shows the immobilization of fluorescently labeled small PEGA-particles in a PEGA-polymer by inverse suspension polymerization of a mixture of small labeled particles with partially acryloylated bis-amino PEG. Fig. 21B shows labeling of the beads illustrated in Fig. 21 with 2,3-dinaphthaldehyde in the presence of DMF/H₂O (bottom), or fluorescein succinimide ester in the presence of NaCN, MeOH (top).

Fig. 22 (Scheme 2): Fig. 22A shows polymers particularly useful for immobilization of encoding particles are: PS, POEPS, POEPOP, PEGA, CLEAR, Jandagel or derivatives of any of these. Alginates, gelatines, aluminas, pore glasses and silicas are other types of useful supports. Fig. 22B shows further polymers particularly useful for immobilization of encoding particles are: SPOCC, Expansin, Polyamide or derivatives of any of these. Alginates, gelatines, aluminas, pore glasses and silicas are other types of useful supports.

Fig. 23 (Scheme 3): shows split and combine synthesis of a library of 400-dipeptides on 1000 beads with reading of encoding at each reaction step.

Amendments to the Drawings

Please replace sheet 1/34 (Scheme 1A) with the attached replacement sheet (Fig. 21A).

Please replace sheet 2/34 (Scheme 1B) with the attached replacement sheet (Fig. 21B).

Please replaced sheet 3/34 (Scheme 2A) with the attached replacement sheet (Fig. 22A).

Please replace sheet 4/34 (Scheme 2B) with the attached replacement sheet (Fig. 22B).

Please replace sheet 11/34 (Scheme 3) with the attached replacement sheet (Fig. 23).

Please replace sheet 30/34 with the attached replacement sheet (Fig. 15).